

Notice of Allowability

Application No.

10/656,614

Examiner

Manglesh M. Patel

Applicant(s)

WICKS, ANTHONY ROBERT

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE 7/23/2007.
2. ☒ The allowed claim(s) is/are 1-10 and 12-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven J. Henry on September 27, 2007.

EXAMINER'S PROPOSED AMENDMENT

Claims

Please Amend the Claims With the Following:

1. (Currently amended) A computer-implemented method of interactively managing information correlating a list of items and a list of attributes which are external to, and independent of, the items but which at least some attributes being selectively allocated to the items, comprising:

displaying the list of items as a column of rows, each row displaying the name of an item in the list of items;

displaying to the side of the column a set of vertical strips extending the length of the column, each strip being associated with a different attribute of the list of attributes; and

displaying markers in the strips at selected positions where the strips cross rows, said positions being selected in accordance with whether the item named in the crossed row has ~~(or alternatively has not)~~ the attribute associated with that strip;

wherein the vertical strips extend beyond the column of rows of items and have horizontal extensions themselves forming a column of rows, each row displaying the name of an attribute in the list of attributes;

wherein the method further comprises storing the name of each item in the list of items and information identifying the attributes of each item;

wherein the horizontal extensions of each attribute strip further displays a filter option indicator;

and wherein the method further comprises receiving user input to select at least one filter option, storing the selected filter options and displaying the or each corresponding filter option indicator;

filtering the list of items according to the or each filter option selected by the user;

redisplaying the filtered list of items in the column of rows and the associated markers in the selected positions of the strips.

2. (Currently amended) A computer-implemented method of interactively managing data elements in a computer system, each data element having at least one associated attribute, the attribute being external to, and independent of, the data element, at least some attributes being selectively allocated to the data element, the method comprising:
 - storing identifiers of each data element and information identifying the attributes of each data element;
 - displaying ~~identifiers~~ names associated with each of the data elements in a list as a column of rows,
 - displaying a set of attribute strips arranged to extend vertically ~~extending along~~ at least one side of the column of rows and extend beyond the column of rows, the attribute strips further having horizontal extensions themselves forming a column of rows, each attribute strip being associated with a possible attribute for the data element, wherein each attribute strip has a first section containing ~~an identifier~~ a name of a possible attribute of a data element, a second section comprising a filter option indicator and wherein each attribute strip further comprises attribute marker sections for each data element;
 - displaying a marker in the attribute marker section of each attribute strip if the data element possesses the attribute associated with that attribute strip based on the stored data;
 - receiving user input to select at least one filter option;
 - storing the selected filter options and displaying the or each corresponding filter option indicator;
 - filtering the data elements according to the or each filter option selected by the user;
 - redisplaying the filtered data elements in the column of rows and the associated markers in the attribute marker section of each attribute strip.
3. (Previously presented) A computer-implemented method according to Claim 2 wherein data elements are selectively filtered based on the presence or on the absence of a selected attribute.
4. (Previously presented) A computer-implemented method according to Claim 2 wherein the data elements are filtered using a combination of positively or negatively selected attributes.
5. (Original) A computer-implemented method according to Claim 2 further comprising storing information indicating whether each data element possesses each attribute.

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6. (Original) A computer-implemented method according to Claim 2 wherein the attribute marker sections of the attribute strips are provided at the intersection between each attribute strip and each row in the column of rows.
7. (Original) A computer-implemented method according to Claim 2 further comprising allowing a user to select or deselect an attribute for a data element.
8. (Previously presented) A computer-implemented method according to Claim 7 wherein the attributes are selected or deselected by setting the marker on or off in the attribute marker section at the intersection of the data element row and the attribute column.
9. (Original) A computer-implemented method according to Claim 2 further comprising storing a first table separately from the data elements, wherein the table comprises an identifier of each attribute and a filtering flag indicating whether the attribute has been selected for filtering.
10. (Original) A computer-implemented method according to Claim 2 further comprising providing a second table for storing information associated with the data elements wherein the table comprises a pointer to each data element and an attribute flag for each attribute in the first table showing whether the attribute is on or off.
11. (Cancelled)
12. (Currently amended) A computer-implemented method according to Claim 2 ~~wherein the attribute strips have horizontal extensions, a plurality of the horizontal extensions forming a second column of rows, wherein the horizontal extension of each attribute strip includes the first section containing the attribute identifier and the second section containing the filter option indicator.~~
13. (Original) A computer-implemented method according to Claim 2 wherein each attribute strip is mutually visibly distinct.
14. (Original) A computer-implemented method according to Claim 2 further comprising providing a plurality of sets of attribute strips associated with a plurality of sets of attributes and providing selection means for a user to select one or

more sets of attribute strips to be displayed.

15. (Original) A computer-implemented method according to Claim 14 wherein seven attribute strips are provided for each page of attributes.
16. (Original) A computer-implemented method according to Claim 15 wherein the seven attribute strips are coloured in a rainbow of colours.
17. (Original) A computer-implemented method according to Claim 2 further comprising receiving user input to create a new attribute and assign the new attribute to selected data elements.
18. (Original) A computer-implemented method according to Claim 2 wherein identifiers of data elements that are not installed are displayed.
19. (Currently amended) A computer-implemented method for displaying a filterable list of items, the method comprising:
displaying the list of items as a column of rows, each row displaying ~~various information~~ a name pertaining to the item, this column being enclosed by a set of horizontal differently coloured strips set one above the other across the top and a matching set of vertical coloured strips down one or both sides, each vertical strip forming a right-angle with its correspondingly coloured horizontal strip, together forming a rectangular approximation to a rainbow;
displaying in each or some of the horizontal coloured strips the name of an attribute that the items in the list may possess, as well as an option box to allow filtering of the list on the presence or absence of the attribute, wherein each attribute is external to, and independent of, the items, at least some attributes being selectively allocated to the items;
using each rectangle formed by the intersection of a vertical coloured strip and a horizontal item row to display a marker if the item possesses the attribute shown in the corresponding horizontal coloured strip;
further using this rectangle, where the user is allowed to set the attribute, to accept a mouse click from the user to toggle the attribute on or off for the item;
allocating a first table separately from the items to be listed, each element to contain an attribute name and a flag indicating whether the attribute has been selected for filtering, and if so whether positively or negatively;
allocating a second table for storing as many elements as there are items to be listed, each element containing a pointer to the item, as well as a flag for each attribute in the first table showing whether the attribute is on or off;

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initializing the first table with attribute names;
generating entries in the second table for each item to be listed;
updating the filtering flags in the first table according to input from the user;
updating the attribute flags in the second table according to input from the user;
displaying the attributes together with the list of items or a subset thereof according to the two tables.

20. (Currently amended) A computer-readable device for interactively managing data elements in a computer system, each data element having at least one associated attribute, the attribute being external to, and independent of, the data element, at least some attributes being selectively allocated to the data element, the device arranged to carry out a method comprising:

storing ~~identifiers of a~~ a name associated with each data element and information identifying the attributes of each data element;

displaying ~~identifiers~~ the names associated with each of the data elements in a list as a column of rows,
displaying a set of attribute strips ~~extending~~ arranged to extend vertically along at least one side of the column of rows and extend beyond the column of rows, the attribute strips further having horizontal extensions themselves forming a column of rows, each attribute strip being associated with a possible attribute for the data element, wherein each attribute strip has a first section containing ~~an identifier~~ a name of a possible attribute of a data element, a second section comprising a filter option indicator and wherein each attribute strip further comprises attribute marker sections for each data element;

displaying a marker in the attribute marker section of each attribute strip if the data element possesses the attribute associated with that attribute strip based on the stored data;

receiving user input to select at least one filter option;

storing the selected filter options and displaying the or each corresponding filter option indicator;

filtering the data elements according to the or each filter option selected by the user;

redisplaying the filtered data elements in the column of rows and the associated markers in the attribute marker section of each attribute strip.

21. (Previously presented) A computer-implemented method according to Claim 2 wherein a first set of attributes ~~can be~~ are selectively allocated to the data element by a user and a second set of attributes that are read-only and that cannot be selectively allocated to the data element.

REASONS FOR ALLOWANCE

2. Claims 1-10 and 12-21 are allowed.
3. The prior art of record fails to disclose or suggest features in the Proposed Amendment.
4. The following is an examiner's statement of reasons for allowance: The cited reference of Davis (NPL, Application Development Methodology) fails to teach the interactive filtering of data elements. Furthermore the reference also fails to suggest or teach selectable filter options associated with the attributes. Most importantly the reference fails to teach filtering of data. Also Labarge (U.S. Pub 2002/0120604) fails to teach wherein the vertical strips extend beyond the column of rows of items and have horizontal extensions themselves forming a column of rows including an attribute name in a list of attributes. Although Labarge teaches the filtering of data the concept of selecting filter options associated to attributes is different than the present invention. The present invention saves significant time by allowing the user to either select/deselect an attribute filter thus correspondingly selecting/deselecting all the items associated with that attribute, whereas according to the teachings of Labarge one would have to manually deselect/select all the items associated under the attribute column because he fails to teach that the attribute has a filter option, instead only showing filter options for the items. Furthermore the horizontal extensions has described in the Independent claim have a significant advantage in the filtering process. For example long attribute names can be specified and clearly seen in a horizontal fashion, whereas Labarge shows cells that must be manually expanded by the user. Thus the horizontal extensions of attributes forming a column of rows save significant time and display space if the data contains long names thereby avoiding scrolling. Since Davis mentions nothing of data filtering and selection the skilled artisan would not have combined teachings with Labarge's data filtering tool.

Furthermore, the claimed feature would not have been obvious to a person of ordinary skill in the art at the time of the invention in view of the prior art of record. Because neither Davis nor Labarge teach the features recited in the independent claims has described above. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled Comments on "Statements of Reasons for Allowance".

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M, W 6 am-3 pm T, TH 6 am-2pm, Fr 9am-6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manglesh M. Patel
Patent Examiner
September 27, 2007



STEPHEN HONG
SUPERVISORY PATENT EXAMINER